

Town of Arlington  
Electronic Voting Study Committee  
Town Hall Annex, 2nd floor conference room

**Minutes of April 6, 2015**

**Call to Order** The special meeting of the Town Meeting Electronic Voting Study Committee was called to order by Eric Helmuth, chair, at 7:38 pm on April 6, 2015, in the 2<sup>nd</sup> Floor meeting Room of the Town Hall Annex. A quorum was present.

**Attendees** Eric Helmuth, Chair, Steve Storch, Roland Chaput (asked by the chair to take minutes), Wes Beal and John Leone. Mr. Chris Moore was welcomed as our newest member. Adam Auster arrived after the start of the meeting.

**I. Approval of Minutes**

The minutes of June 3, 2014, were reviewed and approved with no corrections, additions or deletions.

**II. Results of 2014 Town Meeting use of electronic voting**

Both Mr. Helmuth and Mr. Leone felt last year's sessions using electronic voting went well. There was considerable discussion emphasizing the acceptance by town meeting members. The system has now been leased from Option Technologies Interactive (OTI), by the Town Manager and will be installed in time for the opening of this year's town meeting. Mr. Helmuth stated it appears we should get at least three years of use for the hardware and possibly longer. The annual cost for the system works out to approximately \$9800.00

**III. Committee's Report to Town Meeting**

Members agreed that Mr. Helmuth would review the "Tasks and Procedures" document again. Mr. Storch expressed concern about the manner in which these processes will be sustained by the town. Mr. Helmuth's efforts last year and this year will help alleviate concerns going forward. He also asked one of us to volunteer to conduct the EVSC sessions if he was not available.

Members briefly discussed the possibility of having a staff person who might be someone from the Town Meeting Procedures Committee. Mr. Leone stated that since the town is well known for using volunteers, a paid staff person may be difficult to establish. Several members noted that the screen was a bit difficult to read and a second screen may be needed in the back of the hall. They also agreed that multiple tubs worked well when picking up the handsets at the end of each session. Members noted that ID badges are useful if town meeting members have questions. The town's web site manager will get notices out as

needed. At least 4-6 high school students will be needed for passing out and retrieving handsets. Mr. Chaput will prepare a "How To" piece similar to last year. The question of "new" town meeting members was discussed. Per Mr. Beal, there will be 24 who may need extra time to learn the system. Other items discussed included the use and advantages of a tally report, elimination of the moderator's clock and to only employ the OTI system operator's timer. The Tally display was difficult to read but a larger font would require an extra screen to cover all 21 precincts. Mr. Moore felt there wasn't enough time for actual voting and suggested we up the window to 15 seconds. There was discussion about use of lanyards for members. The idea was abandoned due to the need to remove them before the handsets could be replaced in the cases. Mr. Leone will still do a short practice run before the first session.

#### **IV. Discussion Status of the Committee**

The members believed they had completed the mandates of the Town Meeting Electronic Voting Study Committee. Mr. Auster moved to ask to be discharged at the close of town meeting. Motion passed. Further information will be available via the town's web site on the "Town Meeting" page via a link.

#### **VI. Adjournment**

Mr. Beal moved to adjourn the meeting. Motion passed and the meeting adjourned at 8:27 pm.

Roland E. Chaput  
Acting Secretary

**Final Note:** Acting on the Committee's recommendation, Town Meeting voted on April 29, 2015, to disband the Town Meeting Electronic Voting Study Committee. This action became effective upon the adjournment of the 2015 Annual Town Meeting on xx.

Consequently, no further meetings are possible and there will be no opportunity for the Committee to approve these minutes.

Nonetheless the minutes are to the best of our knowledge and belief an accurate account of the business transacted at the April 6, 2015, special meeting.

Adam Auster  
Secretary

Eric Helmuth  
Chair

Documents attached to these minutes

1. Notice of meeting
2. Proposal of Option Technologies to provide electronic-voting services
3. Contract with Option Technologies to provide electronic-voting services
4. Electronic Voting Survey for Arlington Town Meeting Members
5. Electronic Voting in Arlington Town Meeting
6. Tasks and Procedures for the E-Voting Coordinator

## **Town Meeting Electronic Voting Study Committee**

Eric Helmuth, Chair | Adam Auster, Secretary

Monday, April 6, 2015, 7:30 p.m.

2<sup>nd</sup> floor conference room, Town Hall Annex

### **AGENDA**

- 1 - Call to Order
- 2 - Review and approval of minutes
- 3 - Electronic voting logistics and procedures for Annual Town Meeting 2015
- 4 - Committee's Report to Town Meeting
- 5 - Discussion: Status of this committee
- 6 - Other business
- 7 - Adjournment



January 30, 2015

Adam W. Chapdelaine  
Town Manager  
Town of Arlington  
Town Hall Annex, 2<sup>nd</sup> Floor  
730 Massachusetts Avenue  
Arlington, MA 02476

*RE: Bid #15-02*

Dear Mr. Chapdelaine,

We at Option Technologies International, LLC thank you for the opportunity to provide a response to your Request for Bid #15-02 for electronic voting support for the April 2015 Town Meetings in Arlington.

The response to your Request for Bid is attached. Option Technologies will provide a complete solution that satisfies every aspect of the Town Meeting voting process, from pre-event planning, equipment installation, rehearsals with the Moderator, Clerk and other team members, to voting on articles and motions and post-event removal of equipment. We have provided pricing for ten nights of Town Meeting.

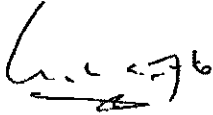
Option Technologies offers one of the world's largest rental fleets of advanced multi-digit radio keypads. We combine this cutting edge hardware with the widest family of proprietary interactive software products in the industry, including our proprietary Council Voting Module.

Our system seamlessly gathers and displays representative voting results as the Town Meeting unfolds. The CVM provides a wide variety of interactive polling and data display tools that work well within the flow of Town Meeting deliberations at the direction of the Town Moderator.

Option Technologies International (OTI) has set the standard for flawless interactive presentations and facilitated meeting support for more than thirty years. We have a proven track record of outstanding client service.

We have demonstrated our open Town Meeting capabilities in the 2014 Arlington Town Meeting as well as during meetings with other Massachusetts towns. We appreciate the opportunity to submit this bid and hope to work with you team again this year.

Best regards,

A handwritten signature in black ink, appearing to read "Mark A. Fite". The signature is stylized with a large initial "M" and a long horizontal stroke.

Mark A. Fite,  
President/CEO

**Electronic Voting System  
Bid No. 15-02  
Price Proposal Sheet**

1. Furnish Electronic Voting System as required:

FY2015 Annual Town Meeting: \$ 14,269.00 per meeting/session

Option to Renew for additional 2 years at the sole discretion of the Town of Arlington subject to funding:

FY2016 Annual Town Meeting: \$ 14,768.42 per meeting/session

FY2017 Annual Town Meeting: \$ 15,285.31 per meeting/session

AUTHORIZED SIGNATURE:

PRINT NAME:

Mark A.Fite

TITLE:

President

COMPANY NAME:

Option Technologies International, LLC

ADDRESS:

3301 Bartlett Blvd. Orlando, FL 32811

TELEPHONE:

407-872-3333

CONTACT PERSON:

Mark Fite

DATE SIGNED:

1 - 30 - 15

**CERTIFICATE OF NON-COLLUSION**

Pursuant of M.G.L. Ch. 62C, Sec. 49A, I certify under the penalties of perjury that I, to my best knowledge and belief, have filed state tax returns and paid all state taxes required under law.

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

FEID: 27-0211984

Social Security Number or  
Federal Identification Number

Corporate Office - (if applicable)

Signature of Individual or Corporate Name

**Town of Arlington  
Request for Proposal (Bid #15-02)**

**Responses from Option Technologies International**

**A.1 Project Objective**

**Requirement A1.1A – Vote Confirmation**

**The System will provide a visual vote confirmation to each individual authorized voter on any item or procedure that may be presented for an electronic vote at sessions of the 2015 Arlington Town Meeting.**

**Response A1.1A – Vote Confirmation**

Option Technologies will provide OptionFinder G3 keypad handsets to each individual authorized voting representative at the 2015 Arlington Town Meeting. When a vote occurs the representative will press "1" for "YES" and "2" for "NO". Each handset will then receive an acknowledgement from the base station and the handset will display "YES Received" or "NO Received" on the representative handset. Voters may change their mind while polling is open. They will receive a confirmation message on their handset that corresponds with their new selection each time they submit a new vote.

If desired, the acknowledgement messages will remain on each representative handset until the Moderator moves to the next Article, question, or motion. The system also provides the capability to display voting results publicly, by representative, while voting is underway or after voting is closed.

**Requirement A1.1B – Tally Voting Results**

**The System will Tally and display in-progress voting and voting results to all Town Meeting attendees in varying customized formats and levels of granularity.**

**Response A1.1B – Tally Voting Results**

If desired, the OptionPower® Council Voting Module system will display votes and tallies while voting is underway. Each representative voting display screen for each question may be customized in a variety of ways to match the sequence and formatting preferences of the Moderator and Town leaders. This includes countdown timer, rotating panels showing votes by representatives and precincts as well as Pass/Fail indicators tied to the quantum required for the each question (50%, 2/3rds etc.).



#### **Requirement A1.1C – Secure Permanent Record**

**The System will create a secure permanent electronic record of the details of all such voting (such details to be recorded at the level of every vote taken by every specifically identified Town Meeting member).**

#### **Response A1.1C – Secure Permanent Record**

All votes are recorded and stored in a Microsoft SQL database. The OptionPower® proprietary relational data model records every vote for every representative, the title of every motion or question, as well as roster information about each voting representative. This database is secure and allows for immediate data reporting and export.

#### **B.1 System Components and Services**

##### **Requirement B1.1A System Computer :**

**The System computer (also referred to as the "operator's computer") will host the software used to develop/customize and project displays, run votes, record and maintain an archive of results, and produce reports. It will interface with the vendor-supplied radio receiver base unit(s) (see below), and with a Town-provided projection system and local cable access television via standard output connectors and VGA or BNC signaling. The System computer (as well as all other System components) should not require Internet connectivity for proper operation.**

**Responding vendors shall provide the specifications for the System computer. This should include hardware configuration details as well as the required operating system and any supporting commercially available application software. Vendors shall also specify whether they will provide video signal switching equipment for selecting either the voting system or the Town's hall presentation computer for display at a given time; in either case, video signal switching should be downstream of the standard VGA or BNC output.**

##### **Response B1.1A System Computer:**

Option Technologies will provide a primary and back-up notebook control computer running Windows 7 and PowerPoint 2013 along with our proprietary OptionPower® software with the Council Voting Module add-on. We will provide a primary and back-up OptionFinder G3 radio transceiver (base station) that connect to the computer and will communicate with radio handsets issued to 252 voting representatives.

Recommended system requirements include a computer with a 2 GHz processor, 4 GB of memory and 100 GB of available hard drive space. The recommended operating systems are Microsoft Windows 8,

Windows 7, or Windows XP (32 or 64 bit). The system must also include a licensed version of Microsoft Office 2013 or 2010 (32 bit) including PowerPoint, Excel and Word.

The computer system will output VGA signals to a primary and back-up VGA switches and VGA Video Distribution Amplifiers. The switching and signal distribution system will provide a VGA output for projection and local access television as well as a monitor for the Town Moderator and Town Clerk at their position. The voting system can be configured to allow seamless switching back and forth between computer displays of material associated with Articles on the warrant and voting screens.

**Requirement B1.1B - Radio Receiver Base Unit(s):**

**Radio receiver base unit(s) to support reliable, secure, and prompt receipt, storage, and display of votes from up to 252 handsets, and the delivery of confirming responses back to each of those handsets. The respondent shall stipulate for the proposed System the maximum end-to-end time it will take for the performance of that functional sequence for each voter (i.e., handset vote selection through handset feedback display), and also for the tabulation and display of results at the end of the Town-selected voting period.**

**Response B1.1B - Radio Receiver Base Unit(s):**

The OptionPower® system, OptionFinder G3 handsets and radio transceiver base stations typically tabulate responses from 252 handsets every 3 seconds. Handset acknowledgement messages will typically be received within 3 seconds after tabulation. Results typically display on public screens two to three seconds after the close of polling.

Heavy interference or high levels of competing radio traffic on the 2.4 GHz band in close proximity can slow these response times.

**Requirement B1.1C - Battery Powered Handsets:**

**Battery-powered handsets for 252 Town Meeting members, plus sufficient additional units to serve as spares. The Town prefers that handset batteries shall be non-rechargeable and of general-purpose type such as AA or AAA; however, the respondent may propose an alternative using custom or rechargeable batteries (along with supplied charging equipment). Vendors must specify the maximum number of simultaneous users (active handsets) that can be supported by their System.**

**Response B1.1C - Battery Powered Handsets:**

We will provide handsets for all 252 Town Meeting members plus 25 spare units. Each OptionFinder G3 handset uses two standard non-rechargeable AA batteries. The batteries have a life of approximately one year under typical usage. The Option Technologies Voting Administrator will test every handset each day before Town Meeting and replace the batteries in any unit that does not indicate a "full" battery status.

The OptionFinder G3 hardware system scales to a maximum of 15,500 simultaneous users (active handsets) in a single venue.

**Requirement B1.1D – Storage Containers:**

**Storage containers for all System hardware (e.g., handsets, base unit(s)). If the respondent proposes the use of rechargeable batteries, the storage containers shall also accommodate the recharging components, including wiring and charging stations.**

**Response B1.1D – Storage Containers:**

Option Technologies will provide secure plastic resin cases with slotted foam to store all equipment. We will provide foam racks to organize keypads, by precinct, for pick-up by voting representatives as they arrive at Town Meeting.

Charging cases are not required.

**Requirement B1.1E – System Operation:**

**System operation. The selected vendor will provide onsite staff to take primary responsibility for operation of the System during the covered Town Meeting sessions. Because this is a sensitive initial deployment meant to provide a robust trial of electronic voting in Town Meeting, reliability and smooth operation is especially important. The Town believes this objective can best be met by a vendor-supplied operator(s). While Town IT and other Town staff and appointed volunteers will be available to operate Town-provided systems and to handle administrative requirements (e.g., distributing and collecting handsets), it is expected that their operational knowledge of the electronic voting system will be limited; thus, the onsite vendor representative(s) will be instrumental to the successful operation of the system.**

**Responding vendors should describe the functions to be provided by their on-site staff in detail. Given the need to configure and verify operation of the System hardware and software components prior to**

each Town Meeting session, and to properly archive the session's voting data and inventory and secure equipment afterwards, it is expected that the onsite support will commence before the official start of each evening's meeting, and will continue for some time after adjournment. Vendors should provide their expectations for total time spent by their staff onsite (number of vendor staff, hours per Town Meeting session). Note that the typical duration of each Town Meeting session, from opening to adjournment is 3 hours.

**Response B1.1E – System Operation:**

Our on-site Option Technologies Voting Administrator will set up, install, and operate the system. Town representatives will be needed for handset distribution and collection.

**B.2 System Capabilities**

Requirement B.2.1 - Voting shall be conducted via pre-assigned unique (at the "hardware level") handsets that will be configured to be associated with, and then distributed to, each Town Meeting member. The handset shall support the user entry of one of three voting choices (Yes/No/Abstain), and shall include a display used to confirm the user's votes. Such confirmation shall be of the user votes as actually received by the radio receiver base unit and registered in the System voting results database, i.e., confirmation must be based on feedback received by the handset from the base unit rather than simply being a local echo of user input. Vendors shall describe how this is accomplished.

**Response – B.2.1**

Each representative will receive a two-way OptionFinder G3 radio handset. Each handset will be uniquely identified by a number tied to the roster of representatives. For each vote, the representative may press "1" for "YES", "2" for "NO", and "3" for "ABSTAIN". The display on the handset will confirm the selection and then display a confirmation message transmitted to the handset from the control computer indicating "YES Received", "NO Received" etc. This confirmation message will stay visible on the individual handset until the display is reset by the Voting Administrator.

**B.2.2 The System shall allow, without limit, a voter to change his/her vote during the voting period for each matter, with only the final vote received by the System as of the close of the period being effective.**

**Response B.2.2**

The voter may change his or her vote at any time during the voting period. Only the final response received during the voting window will be tabulated.

**B.2.3 The handsets must operate reliably and securely within a 56' X 66' auditorium, without interfering with, or being interfered by, cellphone transmissions, 802.1x wireless transceivers, assisted-listening devices, wireless microphones, or other common wireless devices. Vendors should specify the maximum reliable range for the handsets, and should describe technical measures taken to protect the integrity of handset-to-base-station data communication, and to mitigate against interference from/to other wireless systems. Any potential interference interactions with other systems should be described.**

#### **Response B.2.3**

All OptionFinder G3 handsets use proprietary two way radio chips and Frequency Hopping Spread Spectrum (FHSS) communications to transmit, receive, and verify encrypted data packets. The encryption scheme is proprietary. The G3 systems operate on the 2.4 gigahertz band which is also utilized by 802.1x devices. These systems do not use 802.1x protocols or channels. Population of all 16 802.1x channels with high powered access points in the same room as the voting system, along with high utilization, can slow the performance of the voting system.

Range and performance of OTI keypads are determined by the physical characteristics of the room, interference or harmonics on the radio spectrum in close proximity to the system, and the position and elevation of the base station transceiver. Depending on these variables the reliable range of G3 can typically vary from 400 feet to 650 feet. Experience at the 2014 Arlington town meeting suggests that we can expect good radio coverage and performance throughout the auditorium.

System signals are encrypted and involve proprietary radio chips and methods as described above. The OTI electronic voting system involves additional security layers in addition to encrypted transmission.

**B.2.4 The handsets shall include a low battery indicator. Battery life for the units must be at least 4 hours. Vendors should specify the expected battery life when the handsets are on and in "ready to vote" status.**

#### **Response B.2.4**

Each handset includes a display with a battery status indicator. Battery life is normally one year with use four to eight hours per day five days per week.

**B.2.5 If the handsets can support other non-essential System functions (e.g., requesting the attention of the Moderator), these should be specified.**

**Response B.2.5**

The OptionPower® system includes a Speaker Queue function. Voters press a key on their handset to add themselves to a Queue of individuals who wish to speak. Because the Voting Administrator is tasked with quickly preparing ad hoc voting slides while debate takes place, we do not typically recommend the use of the Speaker Queue function for Town Meetings.

**B.2.6 It is critically important that the System will be able to provide reliable service during the covered Town Meeting sessions. Respondents should describe the measures that will be taken to ensure continued operation in the case of failure of handset, radio receiver base unit, or System computer hardware, including the expected quantities of spare unit provisioning. In the case of handset failure (or handset loss by the "owning" Town Meeting member), the vendor shall provide the detailed, step-by-step, process by which the old handset will be replaced by a properly-configured replacement unit that is then recognized by the System as being associated with the same member. The approximate elapsed time for such replacement should be specified. The System must lock out the previously recognized handset unless and until the System operator manually reactivates that handset for some future use by any voter.**

**Response B.2.6**

In the event of a problem with an individual handset, a replacement unit is issued to the voter. The Voting Administrator updates the system roster with the new handset ID for the voter. This typically requires one to two minutes depending on the room layout. Handsets not linked to a voter on the roster are "locked out".

**B.2.7 All displays to be generated by the system must be legible from as far as 70 feet away when projected on a large screen with dimensions of approximately 8 feet x 8 feet.**

**Response B.2.7**

Audio visual industry guidelines suggest that an 8 foot high screen is appropriate for maximum projection distances of 48 feet to 64 feet. A ten foot high screen is recommended for projection distances of 70 feet.

With an eight foot high screen a bold 16 point font is the smallest font size legible at 64 feet. This size font will allow for legible display of 48 voter names and results at one time. With this configuration, six screen rotations of updates to the voter grid will be required to display results from 252 representatives. A larger screen will allow for display of more names or better visibility.

**B.2.8 The System shall be capable of generating a customizable display ("Slide") during voting of a 2-line (or more) description of the matter upon which the vote is being taken. Per- member votes of either Yes, No, or Abstain (or Abs), both in text and identified by a unique color, or blank to indicate a non-vote, shall be displayable via multiple Slides at the conclusion of the voting period. Members shall be identifiable by name and precinct number, with a customizable number of member results included per slide.**

#### **Response B.2.8**

The OptionPower Council Voting system allows the Voting Administrator to adjust the vote display screen. This screen displays the title of the motion (2 lines or more), a grid of voter names precincts and votes, voting totals, a countdown timer and a pass/fail indicator. The size of the text and the font can be configured to optimize the public display. The grid of voter names and votes is fully configurable. It rotates manually or automatically until votes from all representatives have been displayed. The number of voter names displayed at one time in rows and columns is adjustable and a direct function of the size of the font selected. Each representative vote is indicated by text (e.g. "YES") and a color (e.g. Green box).

**B.2.9 The System shall further allow for suppression of the display of the individual member votes, such that only total Yes, No, Abstain tallies are shown, and shall be capable of displaying the required vote threshold applicable for passage of the matter to which a vote applies, and whether the matter has passed or failed based on that threshold.**

#### **Response B.2.9**

The OptionPower system allows the Voting Administrator to control the display of names and votes, tallies, and Pass/Fail results either manually or automatically. These visual elements may be displayed (or not displayed) in whatever sequence is preferred.

**B.2.10 The System shall permit ad hoc selection of either displaying or suppressing the display of individual member votes prior to each vote.**

**Response B.2.10**

The OptionPower system allows for complete ad hoc control of the grid of individual member votes (display or hide) on each vote.

**B.2.11 The System shall provide that any of the Slides (including any set of Slides to display the voting results and other matters involving display of all the Town Meeting member information) can be advanced on a customizable timed or on a manual basis.**

**Response B.2.11**

The OptionPower system provides a fully customizable display for each vote. Voting slides can be individually configured to operate automatically (with a timer) or manually.

**B.2.12 The System shall provide for Slides that can be prepared by the operator in advance for both the specific matters expected to come before a given Town Meeting session, as well as for more generic matters (e.g., quorum calls) with the latter being able to be reused during Town Meeting - but with the voting data for each use individually identified and retained. Notwithstanding this capability, the System must efficiently support voting on unanticipated matters first arising over the course of the meeting, or changes in the sequence of voting on expected items. Vendors should describe how such entirely new items or changes are supported.**

**Response B.2.12**

The system allows the Administrator to prepare voting slides for each Article and procedural vote in advance (e.g. quorum call, motion to Refer Back, motion to Amend, etc.) During the meeting, the Administrator typically creates new voting slides by duplicating and modifying existing slides. Each new voting slide is uniquely identified and tracked. Preparation of a new voting slide can take as little as ten seconds depending on the circumstances and skill of the Voting Administrator.



**B.2.13 The System shall provide the option of including in a Slide a customizable countdown clock that indicates the amount of time remaining during a customizable voting period. Real-time voting information (e.g., the instantaneous number of votes cast, without indicating the current Yes/No/Abstain tally) shall be displayable during the voting period. The Town prefers a provision for an indication (e.g., a change in color) during a customizable number of seconds near the end of the voting period. The Town would prefer that the voting count-down time also be included on the handset displays.**

**Response B.2.13**

OptionPower supports a customizable countdown clock that can be placed anywhere on the voting slide. The timer does not change color. No timer is included on handset displays.

**B.2.14 The respondent shall present suggested templates that are considered suitable for presentation of the types of Slides that have been mentioned herein on the aforementioned projection screen when viewed from the aforementioned maximum distance.**

**Response B.2.14**

Option Technologies will work with Town representatives to modify the voting slide templates by adjusting font size and coloration to maximize visibility.

**B.2.15 The System shall provide a secure permanent electronic record of all votes taken, within the operator's computer and available for export to an external device (e.g., a USB "thumb" drive). The record shall contain the Town Meeting members' precinct numbers, names, and their votes along with the description of each corresponding matter voted on and the date & time (to the nearest second) when the voting period for that matter ended. Vendors shall describe specifically how a session's results are stored.**

**Response B.2.15**

The system provides a secure permanent electronic record of all votes taken. During and after each session the voting administrator will export the data to an external device (e.g. USB "thumb" drive). The record will contain the names, precincts and individual votes along with the title (description) of each voting matter. All results are stored in a proprietary relational SQL database.

**B.2.16 Voting data shall be capable of easily being exported via standard non-proprietary formats such as Excel, PDF, Word, and CSV; vendors shall specify the formats supported by their System and shall describe options for generating reports of voting results.**

**Response B.2.16**

All voting data may be exported in Microsoft Excel, Word, CSV and XML formats. The system includes report layouts for representative Town Meeting voting by individual and Precinct. These reports are typically prepared and transmitted as Excel files.

**B.2.17 The System database on the operator's computer for each Town Meeting session shall have a reversible "lock" that is set at the end of each session so that an explicit, additional, action is required to make that file editable. Correction of improperly recorded votes shall be allowed by the System, with such corrections noted in transaction/audit logs and on any generated reports.**

**Response B.2.17**

The system will support a password based "lock" that will prevent session data from being modified or deleted. The system will support manual correction of improperly recorded votes on session reports along with and a manually created log of such changes.

**B.2.18 In general, respondents shall describe security considerations employed within the operator's computer, as well as within the other System components, to limit the ability to modify the voting records and to preserve previous results in the case of a failure of any component of the System.**

**Response B.2.18**

The OptionPower computers and SQL database are password protected. The Administrator backs up session data to a USB drive at regular intervals during the meeting. At the end of each session, the Administrator prepares generates two USB back-ups of "locked" session data.

#### **4. Submission Requirements and Instructions**

**1. A narrative with appropriate supporting appendices that addresses the requirements and questions enumerated above. Specify any equipment or functions that would be the Town's responsibility not already enumerated above.**

##### **Response 4.1**

See attached narrative.

**2. Provide contact information for at least 3 references, with at least one from a municipal body using a comparable system and support services for comparable purposes.**

##### **Response 4.2**

Reference contacts for Towns who have used our systems include:

Town of Wayland:

David Bernstein, Chair; dave.bernstein@comcast.net; 508-358-6165

Town of Westborough:

Wendy Mickel, Town Clerk; wmickel@town.westborough.ma.us, 508-366-3020

Town of Framingham:

Bob Halpin, Town Manager; rhalpin@framinghamma.gov, 508-532-5200

**3. Summarize your company's history, key staff, relevant experience with other municipalities, and other information pertaining to your firm's qualifications and capabilities.**

##### **Response 4.3**

Since our founding in 1985, Option Technologies has grown to become a market leader in the electronic meeting support industry. We currently serve more than 3,000 client organizations around the world who own or rent our audience response systems to tap the power of group interaction. These clients range in size from Fortune 50 companies and major governmental agencies to trade unions and global associations.

OTI is a pioneer in developing and delivering electronic voting solutions for both open and representative Town Meetings in Massachusetts. Our history started with Wayland and Chelmsford in

2011 and has expanded to eleven other municipalities. We successfully provided electronic voting support for Arlington in 2014.

**4. Confirm your ability to provide service on the scheduled dates for Annual Town Meeting, indicating any specific dates you would be unable to provide service (Town Meeting commences April 27, 2015 and meets Mondays and Wednesday evenings for 8 to 10 total sessions).**

**Response 4.4**

OTI is available to provide electronic voting support for the 2015 Annual Town Meeting beginning April 27, 2015 and continuing on Monday and Wednesday evenings until completed.

## **APPENDIX A**

### **Option Technologies International**

#### **Narrative – Proposed Electronic Voting Solution for Arlington Town Meeting**

##### **Overview:**

Option Technologies will provide a complete turnkey service solution that satisfies every aspect of the Town Meeting voting process, from pre-event planning, equipment installation, rehearsals with the Moderator, Clerk and other team members, to voting on articles and motions and post-event removal of equipment.

Our team of experienced interactive consultants and event coordinators will work to make each voting meeting a success. Option Technologies offers the one of the world's largest rental fleets of advanced multi-digit radio keypads. We combine this cutting edge hardware with the widest family of interactive software products in the industry, including our proprietary Council Voting Module that provides on-screen displays of representative votes.

Our flagship OptionPower® tool is the most powerful interactive add-in available for electronic voting. It seamlessly allows for balloting on each vote as the Town Meeting unfolds. The system provides a two way keypad messaging and immediate data and audit data display tools that work well within the flow of Town Meeting deliberations.

Option Technologies Interactive (OTI) has set the standard for flawless interactive presentations and facilitated meeting support for more than thirty years. We have a proven track record of outstanding client service.

##### **Pre-Event:**

OTI will provide a lead consultant for each Town Meeting project. This person will be available for pre-event meeting and in-person meetings with the Moderator, Clerk, Town Manager and other representatives as well as conduct meetings via telephone, web conference or email. We will work with your Electronic Voting Committee to provide detailed written procedures for the Moderator, Clerk, Check-in Volunteers and Teller as well as provide training workshops to ensure smooth implementation of electronic voting technology.

Members of our team will first arrive on location the day before Town Meeting to walk through the venue, confer with your leadership team, conduct a radio spectrum analysis, and finalize plans for the installation of all equipment, cabling and voting technology. The system operator will arrive on-site each day before Town Meeting to connect and test equipment. They will meet with Town staff and the Moderator and Town Clerk to review and rehearse the voting process.

**During Town Meeting:**

The OTI consultant will prepare all keypads for distribution to voting representatives. Each handset will be linked by name, to a representative for on-screen reporting. They will assist with voter questions about the technology and the exchange process for non-functioning equipment.

Our Consultant will work with the Moderator to open and close polling during votes on articles, motions and other ballot initiatives. If desired, we will provide a voting display light that will illuminate during the period voting is open along with a results display at the Moderator/Clerk position. This display will immediately show the vote tally, including any manually cast paper ballots amended to the tally prior to public announcement and results display.

**Post- Event:** OTI consultants will provide a digital report of all votes to the Town Clerk, pack and store all equipment, and meet with Town leaders to debrief and plan process improvements for subsequent electronic voting sessions.

## OptionFinder G3 Wireless Keypad System



The OptionFinder G3 platform provides breakthrough functionality in a compact size.

It lets you improve the accuracy and speed of voting tabulation with a scalable multi-digit platform and a large, bright LCD display with two-way vote confirmation messages.

When your interactive voting requirements move beyond one-way input, the OptionFinder G3 system offers a number of powerful capabilities.

The G3 provides breakthrough functionality for advanced electronic voting functions.

### Keypad System Benefits

Features	Benefits
2-line LCD display	<ul style="list-style-type: none"><li>• Provides for login and sophisticated alpha-numeric communication with voters.</li><li>• Supports both numeric and simple text input and communicates message prompts back to participants to confirm each vote.</li><li>• Allows participants to enter and view response choices with up to 11 characters.</li></ul>
Decimal point and alphanumeric entry including symbols	<ul style="list-style-type: none"><li>• Supports YES/NO/ABSTAIN selection and multi-digit candidate number input.</li><li>• Offers the ability to select several answer choices for the same question.</li></ul>
500 keypad capacity per base station – 31 channels	<ul style="list-style-type: none"><li>• Keypads can be combined and scaled for a variety of simultaneous large or small meeting configurations.</li></ul>
FHSS radio technology	<ul style="list-style-type: none"><li>• Offers superior range, reliability and security to reduce the frustration of lost responses.</li><li>• Supports a base station range of 650 feet.</li><li>• Allows the system to be used license-free worldwide on the 2.4 GHz band.</li></ul>



OFFICE OF THE PURCHASING AGENT  
Town of Arlington  
Massachusetts

Telephone: (781) 316-3010  
Fax: (781) 316-3019

March 11, 2015

Mr. Mark A. Fite  
Option Technologies International, LLC  
3301 Bartlett Blvd.  
Orlando, FL 32811

Mr. Santos:

We are pleased to inform you that, on the basis of your proposal you have been awarded the contract for **ELECTRONIC VOTING SYSTEM/ARLINGTON, MA** for a period of three (3) years (Town Meeting 2015, 2016 & 2017).

Enclosed herewith are four (4) contracts to be executed by an authorized official of your organization. Please have said official sign each contract on page three (3) of the contract. Please affix the corporate seal to page three (3) of the contract. Furnish the Town with a Vote of Corporation authorizing said official to sign for the company.

Return all four (4) contracts properly executed to this office as soon as possible in order that we may expedite the processing of same.

Thank you for your interest in working with the Town of Arlington.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Domenic R. Lanzillotti".

Domenic R. Lanzillotti  
Purchasing Officer

DRL:dl



Enclosure (Contracts)

TOWN OF ARLINGTON  
730 Massachusetts Avenue  
Arlington, MA 02476



SERVICE CONTRACT
------------------

This Contract is for **ELECTRONIC VOTING SYSTEM PER BID #15-02** for the contract period **TOWN MEETINGS 2015, 2016 & 2017**, to be provided to the Town of Arlington, Massachusetts.

This Agreement made this day, Wednesday, March 11, 2015, by and between, **Option Technologies International, LLC, 3301 Bartlett Blvd., Orlando, FL 32811** party of the first part, (hereinafter called the Contractor) and the Town of Arlington, party of the second part, (hereinafter called the Owner), by its Town Manager, (hereinafter called the Manager).

WITNESSETH:

**That the Contractor and the Owner, for valuable consideration, agree as follows:**

**Article 1.** The Contractor agrees to furnish and deliver **ELECTRONIC VOTING SYSTEM/ARLINGTON TOWN MEETING** of a kind and quality in the manner set forth in the invitation for sealed bids which is hereby referred to and made a part of this contract, and in accordance with the "Proposal" submitted by the Contractor which is hereby referred to and made a part of this contract.

**Article 2.** The Contractor shall perform everything agreed by it to be performed properly and promptly in accordance with the terms of this contract and to the satisfaction of the said Town Manager or his duly authorized representative; shall observe and comply with all existing and future state and national laws and town by-laws and regulations in any manner affecting those engaged or employed in the performance of this contract or the conditions referred to; and shall protect and indemnify the Town and the Town Manager and all of its officers and his

officers, agents and employees against any claim or liability arising from or based on the violation of any such law, by-law or regulation.

**Article 3.** The Contractor shall take all precautions for preventing injuries to persons and property in connection with this contract and the performance thereof and shall indemnify and save harmless the Town and the Town Manager and his officers and agents from all claims relating to injuries to any person corporation or property received or sustained by or from the Contractor or its employees in carrying out the terms of this contract or in consequence of any improper materials, implements or labor used therein and to any act, omission or neglect of the Contractor or its employees therein.

**Article 4.** If the Contractor shall neglect to perform the terms of this contract promptly, the Town, by its said Town Manager or his duly authorized representative may, after twenty-four hours written notice to the Contractor, without prejudice to any other remedy it may have, make good such deficiencies, and may deduct the cost thereof from any payments then or thereafter due to the Contractor:

**Article 5.** Should either party find it necessary to terminate this agreement, a written 30-day notice is necessary.

**Article 6.** The owner will not hire any employee of the Contractor for a three-month period after this agreement is terminated unless otherwise is agreed.

**Article 7.** The Town agrees to pay the Contractor within a reasonable time after the delivery of **ELECTRONIC VOTING SYSTEM/ARLINGTON TOWN MEETING** by the Contractor, in accordance with the terms and provisions of this contract as follows:

**FIRST MEETING: \$4,369.00/each**  
**SUBSEQUENT MEETINGS: \$1,100.00/each**

**(Additional 27% discount on above costs for three year contract as per proposal).**

**Article 8.** The final payment for work done under this contract shall be made only after the Contractor has signed a statement under the penalty of perjury, certifying that the work described in the final estimate has been completed by him.

**Article 9.** Neither party shall assign this contract or sublet it in part or as a whole without the prior written consent of the other party hereto. The Contractor

shall not assign any sum or sums due or becoming due to him hereunder without the prior written consent of the Town or the said Town Manager.

**Article 10.** No act or thing other than an express waiver in writing shall operate as a waiver of any provision of this contract, nor shall any waiver of any breach of this contract be held to be waiver of any other subsequent breach.

**Article 11.** The payments of the amounts due under this contract or in accordance with any written alterations of the same by the parties hereto shall release the Town, the said Town Manager and his representatives from any and all claims and liability in anyway relating to this contract or any such alteration thereof or any thing done in pursuance thereof.

**Article 12.** Neither the Town Manager nor his representative or agents shall be under any personal obligation or liability by reason of this contract, the execution thereof or anything relating thereto.

WITNESSETH:

IN WITNESS WHEREOF the said parties have hereunto set their hands and common seal, all in triplicate, on the day and year first above set forth

Signed and sealed in the presence  
of

For the Town of Arlington,

\_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Adam W. Chapdelaine, Town Manager

\_\_\_\_\_  
Name and Title of Officer

Approved as to form,

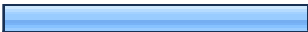


\_\_\_\_\_  
Douglas Heim, Town Counsel

\_\_\_\_\_  
Firm/Corporation Name


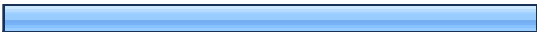

# Electronic Voting Survey for Arlington Town Meeting Members



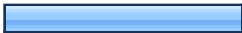


## 1. Thinking about which votes we used the "clickers" for, how often would you prefer to use e-voting next year?

		Response Percent	Response Count
Use more often (on more votes)		45.5%	46
<b>Use about the same</b>		<b>47.5%</b>	<b>48</b>
Use less often (on fewer votes)		6.9%	7
Comments (optional)			34
answered question			101
skipped question			0

## 2. How did you feel about the 20-second period for voting electronically?

		Response Percent	Response Count
Too short		9.9%	10
<b>Just right</b>		<b>80.2%</b>	<b>81</b>
Too long		9.9%	10
answered question			101
skipped question			0

### 3. And the length of time (10 seconds) that each screen of individual votes was shown, when projected?

		Response Percent	Response Count
Too short		35.6%	36
Just right		62.4%	63
Too long		2.0%	2
answered question			101
skipped question			0

### 4. Describe your ability to read the results when projected on the screen:

	Difficult	Average	Easy	Rating Count
Vote totals and pass/fail	24.0% (24)	44.0% (44)	32.0% (32)	100
Individual votes by precinct	32.3% (32)	50.5% (50)	17.2% (17)	99
Comments (optional)				40
answered question				101
skipped question				0

### 5. Any other comments about your experience with electronic voting or suggestions for the future?

	Response Count
	74
answered question	74
skipped question	27

6. Your information (Optional)

		Response Percent	Response Count
Name		98.6%	70
Precinct		100.0%	71
		answered question	71
		skipped question	30

# Electronic Voting in Arlington Town Meeting

## *An Informal Guide*

- The OptionFinder G3 system is a secure wireless radio system that works in the 2.4GHz range. Each Town Meeting representative is issued a unique coded and numbered handset. Do not give yours to anyone to vote for you.
- Your handset will be turned on before the start of Town Meeting. The most reported problem with the handset is that the user has turned it off.
- The only keys we use are: 1 = Yes, 2 = No, and 3 = Abstain.
- While voting is open, you may change your vote multiple times by pressing a new number. The last number pressed when voting closes will be the vote recorded.
- Your vote will be confirmed on the handset's display screen.

### **How do I claim my handset? How should I care for and return it?**

You have been assigned a specific numbered handset and may use no other unit. You may claim yours from the volunteers near the check-in table every night.

Your handset should be turned on and ready to use continuously. If it ever is turned off, press and hold the power button in the lower right corner to turn it on.

Never turn off the handset during the meeting. It will not turn off automatically as long as the base station is on. The batteries should be good for 150 hours of use.

Return your handset at the end of each evening by placing it in any of the receptacles at the edge of the enclosure when you leave. If you leave early you may return it to an electronic voting volunteer.

Do not take your handset home.

### **How do I cast a vote using the handset?**

When the Moderator declares that voting is open and before the countdown clock has reached zero seconds, simply press either the numeric keys 1, 2, or 3, corresponding respectively to Yes, No, and Abstain.

Pressing any additional keys, e.g. send, del, or link, will have no effect.

Your selection will be broadcast to a base station connected to the voting computer, which will record your vote and broadcast a confirming signal back to your handset.

*The confirmation is a complete round trip of your vote from handset to base station and back.*

Do not turn your handset off after the vote.



### **What if I change my mind while the votes are being cast?**

There will be a voting period of approximately 20 seconds. You may change your vote during the voting period. Only your final vote at the close of the voting time period will be tallied.

The 20-second period allows the system to poll the hall several times to ensure that all votes are received and confirmed back to the handsets.

### **What if I change my mind after the votes have been cast?**

As with other forms of voting, the vote you cast during the voting period is your final legal vote and cannot be changed after the fact. There is no provision to change your vote after the vote closes.

### **What will be displayed on the big screen?**

In most instances the individual votes will not be projected on the display screen. The Moderator will announce the result of the vote in the usual way.

Under some circumstances the Bylaws or the Moderator may require that votes of individual members be projected on the screen. If so, the votes will be shown 3 precincts at a time for approximately 10 seconds each screen.

### **How can I verify that my vote has been correctly recorded?**

For all votes, your handset's display screen will confirm the vote broadcast from your handset to the base station and back.

For roll-call votes, and for votes that are very close, and for other votes as directed by the Town Moderator, the votes of all members will be projected onto the display screen, three precincts at a time.

### **What if there is an error with my handset or my vote?**

If your handset does not confirm your vote, immediately rise and gain the attention of the Moderator. You may be issued a new handset and, if analysis determines that your handset malfunctioned, the record of your vote will be corrected.

There will be a test vote at the start of each night to check the accuracy and performance of your handset.

### **May I give my handset to another person to vote in my absence?**

No. Proxy or absentee voting is not authorized for Town Meeting. You must be present to vote.

If you see a member with two or more handsets immediately bring it to the attention of the Moderator with a Point of Order.

### **How will we decide whether to use the handsets to vote?**

That decision is in the hands of the Town Moderator. The Committee expects that we will vote with the handsets frequently, replacing many but not every instance of voting by voice and thus eliminating the necessity of the standing counted vote.

*This guide was prepared by the Town Meeting Electronic Voting Study Committee.*

*It is not an official set of rules and does not replace the Town Bylaws or the rulings of the Moderator.*

Adam Auster, Wes Beal, Roland Chaput, Eric Helmuth, John D. Leone, Elizabeth Patton, Steve Storch.

## ***From the Town Moderator***

### **Under what circumstances might you choose to conduct the vote by voice or standing count?**

In almost all instances of a *no action vote*, I anticipate using a voice vote, as well as on the consent-agenda vote when we initially go over the budget.

### **May I give my handset to another person to cast a vote on my behalf?**

No! There is no provision in either our Bylaws or in State law for proxy voting at a Representative Town Meeting.

### **Under what circumstances will you instruct the electronic voting administrator to project the individual votes on the display screen?**

When 30 or more members arise to challenge the vote as provided for in the Bylaws, or when the vote is close.

### **What if I have a question about voting?**

Just as you would have done previously, rise and ask for a "Point of Order."

—John D. Leone. Town Moderator

For any voice votes called by the Moderator, a standing or electronic tally may be required by 5 members rising for that purpose immediately after the voice vote as provided for by the Bylaws. Similarly, on an electronic vote, 30 or members can rise and require that the individual votes be projected for review.

### **What is the difference between a regular tally and a role-call vote?**

The difference is not as great as it used to be. All of your votes will be recorded and be publicly available after the day of the meeting. A roll call, however, provides that the individual votes be immediately projected and included in the permanent legal record of the meeting that is prepared by the Town Clerk.

Furthermore, in the event of a call for a roll call following an electronic vote, there will be no second vote; the votes already cast will be projected and *become* the roll call.

### **How can members require a roll call?**

As provided for in the Bylaws, 30 members rising immediately after any vote will cause the individual votes already cast (in the case of a prior electronic tally) to be projected and the roll call to be entered into the legal record of the meeting. There is no second electronic vote.

### **What if a disability makes it hard for me to use the system?**

You'll be assigned a volunteer helper, or receive other accommodation as necessary, to enable your full participation. Simply notify the Moderator or any electronic voting volunteer prior to the start of the meeting.

### **Are my votes secret?**

No they are not. Unless a secret ballot has been voted for, by a two-thirds vote of Town Meeting prior to the vote on the Article being taken, a record of your vote will be public.

### **What is the significance of an abstention? Could such votes affect the outcome of a vote?**

Abstentions allow members to show that they are present but not voting. Abstentions are not votes and do not count in any way in the outcome of a vote. Majorities are determined by yes or no votes cast.

### **Is there anything else I should know?**

Only that this is new for everyone and the Moderator will be trying out different approaches as we go along. If you have a question or a suggestion about any vote or the process, please raise it promptly with the Moderator or any member of the Committee.



## **Title I- General Government**

### **ARTICLE 1: TOWN MEETINGS,**

#### **Section 10. Procedural Rules, C. Votes:**

(ART. 13, ATM – 04/29/92), (ART. 22, ATM – 05/11/11)

#### **C. Votes:**

(ART. 13, ATM – 04/29/92), (ART. 22, ATM – 05/11/11), (ART. 12, ATM – 04/22/13)

"All votes, unless otherwise provided by law, shall be taken in the first instance by a "yes" and "no" voice vote or by an electronic tally at the option of the Moderator. If the Moderator is in doubt as to the voice vote, or if five voters immediately question a voice vote, the Moderator shall call for a standing vote or an electronic tally, at the option of the Moderator. In an instance where the difference between the yes and no votes according to an electronic tally is less than 6 votes, then the individual votes shall be displayed.

On all questions submitted for the consideration of the Town Meeting, when requested by thirty or more Town Meeting Members present at the meeting, there shall be a roll call vote, either by voice or by an electronic vote, at the option of the Moderator. If an electronic tally was previously taken on the question, the vote of each Town Meeting Member who voted electronically in the first instance shall be displayed and recorded. All roll call votes, oral or electronic, shall be recorded so as to indicate the individual vote of each Town Meeting Member who shall have voted. Said record of roll call votes, oral or electronic, shall be available as recorded at the Town Clerk's Office.

Whenever a vote of two-thirds of the Town Meeting Members present and voting is required on any matter, the Moderator may declare a motion passed by a voice vote or electronic tally of at least two-thirds in favor. A standing vote or further electronic tally need not be taken unless required by law or these Bylaws. The Town Clerk shall record the Moderator's declaration that the motion passed by a two-thirds vote in favor.

All electronic tallies and votes shall be recorded so as to indicate the individual vote of each Town Meeting Member. These results shall be electronically available to the public for a minimum of three years, or such longer time as required by law."

## Tasks and Procedures for the E-voting Coordinator

### **Before the meeting**

- Notify the OTI administrator of any amendments or substitute motions distributed in advance to the Town Meeting email list or on chairs, so that the he or she can prepare the special voting slides in advance whenever possible.
  - Format: Warrant article number, whether it's an amendment or substitute, and the name of the sponsor (for example; Article 8 Amendment: Paul Bayer).
- Ensure the OTI operator has access and contact numbers for retrieving the locked equipment at the necessary setup start time (currently, 1 pm Mondays & Wednesdays).
- Inform the OTI operator of any deviation in the Town Meeting schedule (for example, not meeting on Memorial Day if we go that long).
- Notify the handset assignment table if there are newly appointed TMMs
- Request printing of any additional EVSC documents (guide, updated handset table, signs) from the Town Manager's office and arrange for pickup or dropoff.
- Attempt to contact any TMM who didn't return their handset

### **On Meeting Day, before the start of the Meeting** (about 6:45 pm)

1. Set up the E-voting handset station:
  - a. Go get a long table and 2 short tables from back stage (if not already set up).
  - b. Position and open the 3 cases with active handsets on the short tables against the wall.
  - c. Put the case with the spares under one of the short tables. Unlatch but don't open it.
2. Get the return bins from the OTI operator (if not already at the station) and position them at each exit.
3. Set out the spare Q&A guides
4. Welcome volunteers at 7 pm and orient any new ones

5. If any new TMM are appointed before the meeting, provide their names and precinct to OTI, and create a temporary handwritten label for the handset.
6. Check in with OTI operator:
  - a. Review any handsets not returned
  - b. Review the warrant article that we'll be starting with
  - c. Review any amendments, substitutes or other special votes anticipated.

### **During the Meeting**

1. Assist the OTI operator in anticipating the next vote, especially unexpected ones such as minor amendments. Help with naming the voting slides and determining the quantum of vote if needed.
2. Work with the e-voting team to troubleshoot handsets and answer TMM questions. If a replacement handset is issued, bring the TMM name, precinct and new handset to OTI to activate.
3. Act as a communication conduit between the moderator and OTI, e-voting staff and OTI, or TMM and OTI if needed.
4. Keep a log of all votes taken and the margins, whether by voice or electronically. This will serve as a useful reference to assist the voting administrator in preparing reports, so that he can verify that all votes we took electronically are included in the reports and titled correctly.

### **After the Meeting**

1. Ensure that the volunteers:
  - a. Collect the handsets from the bins
  - b. Refile the handsets (no need to power them off)
  - c. Put the lanyards and staff badges into the 3<sup>rd</sup> case with the fewest handsets.
  - d. Close all cases and wheel them to the OTI operator's table.
2. Identify any members who did not turn in their handsets and record their name, precinct and handset number.
3. Collect and secure the handset assignment documents, Q&A guides and other papers.
4. Arrange for contacting members who didn't return their handset to ensure they have them at home and ask them to bring them back, or to document a handset loss.